



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,504	09/24/2001	Jung-kwon Heo	1293.1187	7211

49455 7590 08/04/2011
STEIN MCEWEN, LLP
1400 EYE STREET, NW
SUITE 300
WASHINGTON, DC 20005

EXAMINER

COPPOLA, JACOB C

ART UNIT	PAPER NUMBER
----------	--------------

3621

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

08/04/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@smiplaw.com

Office Action Summary	Application No. 09/960,504	Applicant(s) HEO, JUNG-KWON	
	Examiner JACOB C. COPPOLA	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10-33 and 43-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-33, and 43-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgements

1. This Office Action is in reply to the decision by the Board of Patent Appeals and Interferences mailed 28 March 2011 (“2011 March Board Decision”).
2. The period under 37 C.F.R. § 1.304 for seeking court review of the 2011 March Board Decision has expired and no further action has been taken by Appellant. The proceedings as to the rejected claims (*i.e.*, claims 5-7, 9, and 34-42) are considered terminated. See MPEP 1214.06 see 37 C.F.R. § 1.197(b).
3. Because the proceedings as to claims 5-7, 9, and 34-42 are considered terminated, claims 5-7, 9, and 34-42 are cancelled via Examiner’s amendment. Because claims 5-7, 9, and 34-42 are cancelled, claims 5-7, 9, and 34-42 and are no longer pending.
4. Claims 1-4, 10-33, and 43-46 are currently pending.
5. The indicated allowability of claims 1-4, 10-33, and 43-46 is withdrawn in view of the newly discovered references to Lai et al. (U.S. 6,407,680 B1) and Stefik et al. (U.S. 6,233,684 B1). Rejections based on the newly cited references follow.
6. Unless expressly noted otherwise, all references in this Office Action (or in any future office action(s)) to the *capitalized* versions of “Applicant,” “Applicant(s),” or “Applicants” refer specifically to the Applicant of record. Conversely, references to *lowercase* versions of “applicant,” “applicant(s) or “applicants” refer *not* to the Applicant of record but to any one or all patent applicant(s) generally. Unless expressly noted otherwise, references to the *capitalized* version of “Examiner” in this Office Action (or in any future office action(s)) refer specifically

Art Unit: 3621

to the Examiner of record while reference to or use of the *lowercase* version of “examiner,” “examiner(s),” or “examiners” refer to examiners generally.

7. The Examiner of record has changed. Please indicate Jacob C. Coppola on any future correspondence. Contact information for Examiner Coppola may be found at the end of this Office Action.

8. Based on a comparison of Pre-Grant Publication No. U.S. 2002/0120608 A1 (“PGPub”) with Applicant’s originally submitted specification, the PGPub appears to be a fair and accurate representation of the Applicant’s original specification. Therefore, when necessary and unless expressly noted otherwise by the Examiner, any references in this Office Action to Applicant’s original specification will refer to paragraph numbers in the PGPub (*e.g.*, [0043]).

9. This Office Action is assigned Paper No. 20110714. This Paper No. is for reference purposes only.

Claim Rejections - 35 USC §101

10. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 1-4, 10-20, 22-32, 43, and 44 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Regarding Claims 1-4, 11-20, 22-32, 43, and 44

12. Claims 1-4, 11-20, 22-32, 43, and 44 are *alternatively* rejected under 35 USC §101. It is the Examiner's primary position that these claims invoke §112, ¶6 and are indefinite under §112, ¶2 because the corresponding structure cannot be determined. However, in the event that Applicant successfully rebuts the presumption that these claims invoke §112, ¶6, and in the spirit of compact prosecution, the Examiner provides the following alternative rejection.

13. Claims 1-4, 11-20, 22-32, 43, and 44 recite computer programs only. "Computer programs claimed as computer listings per se, *i.e.*, the descriptions or expressions of the programs, are not physical 'things.' They are neither computer components nor statutory processes, as they are not 'acts' being performed." MPEP §2106.01 I. Because the claims recite only abstractions that are neither "things" nor "acts," the claims are not within one of the four statutory classes of invention¹. Because the claims are not within one of the four statutory classes of invention, the claims are rejected under 35 U.S.C. §101.

14. Additionally, the Examiner notes that using the broadest reasonable interpretation of at least "unit," as noted below, each of the claimed units is interpreted as software only. Because the broadest reasonable interpretation of "unit" includes software only, the claims are not within one of the four statutory classes of invention and are therefore rejected under 35 U.S.C. §101.

¹ 35 U.S.C. §101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent; namely, processes, machines, manufactures, and composition of matter. The latter three categories define "things" (or products) while the first category defines "actions" (*i.e.*, inventions that consist of a series of steps or acts to be performed).

Art Unit: 3621

Regarding Claim 10

15. Under the broadest reasonable interpretation, claim 10 is directed to signals *per se*.

16. First, because the preamble of claim 10 limits claim 1 to a “computer-readable medium,” the Examiner finds that the scope of claim 10 is therefore limited to a “computer-readable medium.”

17. Second, the Examiner finds that one of ordinary skill in this particular art may interpret such ‘computer-readable medium’ claims as signals. To support the Examiner’s position that a person of ordinary skill in this art may interpret ‘computer-readable medium’ claims as signals, see Applicant’s original specification ([0047]: “... or carrier waves (e.g., transmissions over the Internet)”) and USPTO memorandum² by Director Kappos, D. J. Subject Matter Eligibility of Computer Readable Media, 1351 OG 212 (Feb 23, 2010)³ (“2010 Kappos Memorandum”) noting that “[w]hen the broadest reasonable interpretation of a claim covers a signal per se, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter.”).

18. Third, because signal claims are not in any statutory category, Applicants’ computer readable-medium claims are considered non-statutory subject matter. *In re Nuijten*, 500 F3d 1346, 84 USPQ2d 1485 (Fed. Cir. 2007).⁴

19. To overcome this particular 35 U.S.C. § 101 rejection and assuming the original specification supports such an amendment in accordance with 35 U.S.C. § 112, ¶1, the Examiner

² See MPEP §707.06 “Citation of Decisions, Orders Memorandums, and Notices” expressly authorizing examiners to cite to Commissioner’s Memorandums which have not yet been incorporated into the MPEP.

³ Also available at http://www.uspto.gov/patents/law/notices/101_crm_20100127.pdf

⁴ See also *In re Nuijten*, 515 F3d 1361, 85 USPQ2d 1927 (Fed. Cir. 2008)(petition for panel rehearing and petition for rehearing en banc denied).

Art Unit: 3621

recommends (by way of example only) that Applicant amend the preamble and insert the phrase “non-transitory.” For example, the claim might recite: “A ***non-transitory*** computer-readable medium encoded with a method ... comprising: confirming an original coding method applied to original content data....”

20. For additional guidance, see the 2010 Kappos Memorandum or contact the Examiner at the number listed below.

Claim Rejections - 35 USC §112, Second Paragraph

21. The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

22. Claims 1-4, 11-33, and 43-46 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Regarding Claims 1-4, 11-33, 43, and 44

23. For at least the Non-Structural Phrases discussed below (see § Claim Interpretation), the corresponding structure cannot be determined.

24. Particularly, claims 1-4, 11-33, 43, and 44 recite the limitations “[x] unit to...” It is self evident that these claim limitations do not use the phrase “means for” or “step for.” However, the claim limitations use non-structural terms, *e.g.* “coding method confirming unit to,” which are terms that are simply a substitute for “means for.” Therefore, the Examiner will apply §112,

Art Unit: 3621

¶6 to the claim limitations that use the non-structural terms associated with functional language.

See USPTO Memorandum⁵ by Bahr, Robert W., Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. § 112 and for Treatment of Related Issues in Patent Applications,⁶ February 9, 2011; and Supplementary Examination Guidelines for Determining Compliance With 35 U.S.C. 112 and for Treatment of Related Issues in Patent Applications, Federal Register, Vol. 76, No. 27, 7162, January 21, 2011.⁷

25. In light of the above, and in light of the Invocation Analysis – 35 U.S.C. §112, ¶6 applied below in the § “Claim Interpretation,” the following claim phrases are limitations that invoke 35 U.S.C. §112, ¶6:

- a. In claim 1, the phrase “coding method confirming unit to confirm an original coding method applied to the original content data;”
- b. In claim 1, the phrase “transcopying unit to convert the original content data into copied content data that is decodable according to a different coding method;”
- c. In claim 1, the phrase “management information recording unit to record information indicating that the original content data has been copied in a management information area of the original content data, and to record information indicating that the copied content data has been transcopied from the original content data in a management information area of the copied content data;”

⁵ See MPEP §707.06 “Citation of Decisions, Orders Memorandums, and Notices” expressly authorizing examiners to cite to Commissioner’s Memorandums which have not yet been incorporated into the MPEP.

⁶ Available at <http://www.uspto.gov/patents/law/exam/memoranda.jsp>

⁷ Available at <http://www.gpo.gov/fdsys/pkg/FR-2011-02-09/pdf/2011-2841.pdf>

Art Unit: 3621

d. In claim 2, the phrase “decoding unit to decode the original content data according to the original coding method;”

e. In claim 2, the phrase “encoding unit to encode the decoded content data using the different coding method to generate the copied content data;”

f. In claim 3, the phrase “reverting unit to record information indicating that rights information is restored from the copied content data in the management information area of the original content data, and to confirm whether the copied content data is transcopied from the corresponding original content data so as to restore the original content data from the copied content data;”

g. In claim 11, the phrase “copying unit to create copied content data from original content data, where the original and copied content data are decoded using different decoding methods;”

h. In claim 11, the phrase “information recording unit to record information in one of the original and the copied content data that relates the original and the copied content data;”

i. In claim 15, the phrase “decoding unit that decodes the original content data coded into standard data;”

j. In claim 15, the phrase “encoding unit to encode the standard data using a different coding method from a coding method used to encode the original content data;”

k. In claim 19, the phrase “encoding method confirming unit to detect the coding method of the original content data using the information of the original content data;”

l. In claim 25, the phrase “reverting unit to revert copied content data into corresponding original content data from which the copied content data was copied;”

Art Unit: 3621

m. In claim 25, the phrase “confirming unit to confirm that the copied content data corresponds to the original content data using identification information in the copied and original content data;”

n. In claim 25, the phrase “control unit to change rights information in the copied and original content data so that the copied content data cannot be reproduced in a content player, and the original content data reflects that the copied content data cannot be reproduced;”

o. In claim 28, the phrase “a copying unit to create copied content data from original content data, where the original and copied content data are decoded using different decoding methods;”

p. In claim 28, the phrase “confirming unit to confirm that the copied content data corresponds to the original content data using identification information in the copied and original content data;”

q. In claim 28, the phrase “control unit to after said copying unit creates the copied content data, to insert identification information in the copied content data relating the copied contents data and the original content data, and to insert information in the original and copied content data indicating that the original content data was copied by said copying unit, and revert the copied content data into the original content data by changing rights information in the copied and original content data so that the copied content data cannot be reproduced in a content player, and the original content data reflects that the copied content data cannot be reproduced;”

r. In claim 31, the phrase “decoding unit that decodes the original content data coded into standard data;” and

Art Unit: 3621

- s. In claim 31, the phrase “encoding unit to encode the standard data using a different coding method from a coding method used to encode the original content data.”
26. For each claimed phrase that invokes 35 U.S.C. §112, ¶6, the written description fails to clearly link or associate the disclosed structure to the claimed function such that one of ordinary skill in the art would recognize what structure performs the claimed function.
27. For each claimed phrase that invokes 35 U.S.C. §112, ¶6, Applicant is required to either:
- (a) Amend the claim so that the claim limitation will no longer be a non-structural term plus function limitation under 35 U.S.C. §112, ¶6; or
 - (b) Amend the written description of the specification such that it clearly links or associates the corresponding structure to the claimed function without introducing any new matter. See 35 U.S.C. 132(a).
28. For more information, see 37 C.F.R. § 1.75(d); MPEP §608.01(o); and MPEP §2181.

Regarding Claims 45 and 46

29. Claims 45 and 46 recite “The content data structure of claim 7...” Moreover, claim 7 is cancelled. Therefore, the scope of claims 45 and 46 cannot be determined. Accordingly, claims 45 and 46 are indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.
30. The Examiner finds that because the claims are indefinite under 35 U.S.C. §112, second paragraph, it is impossible to properly construe claim scope at this time. However, in accordance with MPEP §2173.06 and the USPTO’s policy of trying to advance prosecution by providing art

Art Unit: 3621

rejections even though these claims are indefinite, the claims are construed and the prior art is applied as much as practically possible.

Claim Rejections – 35 U.S.C. § 103

31. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claims 1-4, 10-33, and 43-46, as understood by the Examiner, are rejected under 35 U.S.C. §103(a) as being unpatentable over Lai et al. (U.S. 6,407,680 B1) (“Lai”), in view of Stefik et al. (U.S. 6,233,684 B1 and U.S. 5,629,980, which is incorporated by reference in 6,233,684 B1) (“Stefik”).

Regarding Claims 1-4, 10-33, and 43-46

33. Lai discloses:

confirming an original coding method applied to original content data (see at least step 520 of fig. 5B);

setting a different coding method than the original coding method (see at least step 522 of fig. 5B and fig. 7); and

converting the original content data to generate copied content data that is decoded by the different coding method (see at least step 522 of fig. 5B).

Art Unit: 3621

34. Lai does not directly disclose wherein said converting the original content data comprises recording information indicating that the original content data was transcopied into the copied content data is recorded in a rights management information area of the original content data, and recording information indicating that the copied content data was transcopied from the original content data in a rights management information area of the copied content data.

35. Stefik teaches recording information indicating that the original content data was copied into the copied content data is recorded in a rights management information area of the original content data (see '684 patent, c. 5, ll. 46-59 and Appendix A, for “copy-count”; see also the '980 patent, at least c. 21, ll. 15-24, for discussion on decremented copy-count recorded in original rights area when copy is made – the decremented copy-count indicates that the original was copied), and recording information indicating that the copied content data was copied from the original content data in a rights management information area of the copied content data (see '684 patent discussion of watermarking (*e.g.*, c. 8, ll. 42-64), which is information recorded in management area of copied content indicating that the copied content was copied from the original).

36. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the converting process of Lai, which transcopies original data into copied data, to include the recording of data in a rights management area of both the original content and the transcopied content, as taught by Stefik. One would have been motivated to do so to protect the rights of the content owner.

Claim Interpretation

37. After careful review of the original specification, the Examiner is unable to locate any lexicographic definitions with the required clarity, deliberateness, and precision. See MPEP §2111.01 IV.

Invocation Analysis – 35 U.S.C. §112, ¶6

38. In this section, the Examiner will apply the three-prong analysis, as found in MPEP §2181 I., and as modified by the 2011 112 Memo (citation below), to the first claim limitation only discussed above in § Claim Rejections – 35 USC §112, Second Paragraph. The Examiner is omitting the analysis for the remaining claim limitations for brevity. However, the same analysis can be applied to each claim limitation discussed above in § Claim Rejections – 35 USC §112, Second Paragraph.

Non-Structural Phrase #1

39. Based upon a review of the claims, specification, and prosecution history, the Examiner concludes that the phrase “coding method confirming unit to confirm an original coding method applied to the original content data” as recited in claim 1 (“NSP #1” or “Non-Structural Phrase #1”) invokes 35 U.S.C. §112, ¶6. To support this position, the Examiner notes the following:

Prong (A)

t. First, although NSP #1 does not recite “means for,” the Examiner finds that the claimed “coding method confirming unit to” is a non-structural term. See Part 1, III., C., 1. in

the USPTO Memorandum⁸ titled Supplementary Examination Guidelines for Determining Compliance With 35 U.S.C. 112 and for Treatment of Related Issues in Patent Applications, Federal Register, Vol. 76, No. 27, 7162, January 21, 2011⁹ (“2011 112 Memo”) and by Bahr, Robert W., Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. § 112 and for Treatment of Related Issues in Patent Applications,¹⁰ February 9, 2011.

u. In other words, the Examiner finds that based upon the facts of this particular application, “coding method confirming unit to” is a substitute for “means for.” To support the Examiner’s position that “coding method confirming unit to” is a substitute for “means for,” the Examiner has carefully reviewed the original specification and finds that the specification does not provide a description sufficient to inform one of ordinary skill in this art that “coding method confirming unit to” denotes a particular structure. Furthermore, based upon all evidence now of record, the Examiner finds that the prior art provides insufficient evidence that “coding method confirming unit to” has an art-recognized structure to perform the claimed function.

v. Second, and in accordance with Part 1, III., C., 1. in the 2011 112 Memo and based upon the claim language itself, the Examiner finds that the phrase “coding method confirming unit to” (1) is not preceded by a structural modifier and (2) does not contain another structural modifier that further describes the non-structural term.

⁸ See MPEP §707.06 “Citation of Decisions, Orders Memorandums, and Notices” expressly authorizing examiners to cite to Commissioner’s Memorandums which have not yet been incorporated into the MPEP.

⁹ Available at <http://www.gpo.gov/fdsys/pkg/FR-2011-02-09/pdf/2011-2841.pdf>

¹⁰ Available at <http://www.uspto.gov/patents/law/exam/memoranda.jsp>

Art Unit: 3621

w. Therefore in accordance with MPEP §2181 I., as now modified by Part 1, III., C., 1., as set forth in the 2011 112 Memo, the Examiner concludes that “coding method confirming unit to” meets invocation Prong (A) as set forth in MPEP §2181. I.

Prong (B)

x. In accordance with MPEP §2181 I., the Examiner concludes that NSP #1 meets Invocation Prong (B) because the phrase recites the function of “confirm an original coding method applied to the original content data.” Because nothing in the written description suggests otherwise, this function will have its ordinary and plain meaning.

Prong (C)

y. In accordance with MPEP §2181 I., NSP #1 meets Invocation Prong (C) because the claim does not recite sufficient structure for performing the entire function of “confirm an original coding method applied to the original content data.”

Corresponding Structure

z. Based upon the Examiner’s review of the original disclosure, the Examiner is unable to locate sufficient corresponding structure to perform the function of “confirm an original coding method applied to the original content data.” Moreover, the Examiner finds that the original specification does not clearly link and associate sufficient corresponding structure to the function of “confirm an original coding method applied to the original content data.”

Art Unit: 3621

aa. Because the Examiner is unable to locate sufficient corresponding structure to perform the claimed function in NSP #1 and because the original specification does not clearly link and associate the necessary corresponding structure to the claimed function in NSP #1, the Examiner concludes that claim 1 is indefinite and therefore rejected under 35 U.S.C. §112, ¶2. See also above section titled “Claim Rejections – 35 U.S.C. §112, Second Paragraph” and 2011 112 Memo.

Sources

40. The Examiner hereby adopts the following definitions under the broadest reasonable interpretation standard. In accordance with *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed. Cir. 1997), the Examiner points to these other sources to support his interpretation of the claims.¹¹ Additionally, these definitions are only a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language. Finally, the following list is not intended to be exhaustive in any way:

bb. *unit* “(3) A software component that is not subdivided into other components.” IEEE Standard Computer Dictionary, The Institute of Electrical and Electronics Engineers, New York, NY, 1990;

cc. *unit* “(7) A logically separable part of a program.” IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000;

¹¹ While most definitions are cited because these terms are found in the claims, the Examiner may have provided additional definition(s) to help interpret words, phrases, or concepts found in the definitions themselves or in the prior art.

Art Unit: 3621

dd. *unit* “(8) A portion of a computer that constitutes the means of accomplishing some inclusive operation or function as; for example, an arithmetic unit. See also: execution unit; processing unit; logic unit; arithmetic unit; control unit; functional unit.” IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000;

ee. *processing unit* “A functional unit that consists of one or more processors and their storage. See also: central processing unit.” IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000;

ff. *control unit* “(3) A functional unit of a computer that interprets and executes the instructions of a program in a prescribed sequence. See also: instruction control unit; main control unit.” IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000;

gg. *functional unit* “(2) An entity of hardware, software, or both, capable of accomplishing a specified purpose.” IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000;

hh. *interface* “n. 1. The point at which a connection is made between two elements so that they can work with each other or exchange information.” OR “2. Software that enables a program to work with the user (the user interface, which can be a command-line interface, menu-driven interface, or a graphical user interface), with another program such as the operating system, or with the computer’s hardware.” Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997;

- ii. *network* “(3) (A) (software) An interconnected or interrelated group of nodes.”

IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000.

Conclusion

41. Applicant is respectfully reminded that any suggestions or examples of claim language provided by the Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by the Examiner. To be especially clear, any suggestion or example provided in this Office Action (or in any future office action) does not constitute a formal requirement mandated by the Examiner.

jj. Should Applicant decide to amend the claims, Applicant is also reminded that—like always—no new matter is allowed. The Examiner therefore leaves it up to Applicant to choose the precise claim language of the amendment in order to ensure that the amended language complies with 35 U.S.C. § 112 1st paragraph.

kk. Independent of the requirements under 35 U.S.C. § 112 1st paragraph, Applicant is also respectfully reminded that when amending a particular claim, all claim terms must have clear support or antecedent basis in the specification. See 37 C.F.R. § 1.75(d)(1) and MPEP § 608.01(o). Should Applicant amend the claims such that the claim language no longer has clear support or antecedent basis in the specification, an objection to the specification may result. Therefore, in these situations where the amended claim language does not have clear support or antecedent basis in the specification and to prevent a subsequent ‘Objection to the Specification’ in the next office action, Applicant is encouraged to either (1) re-evaluate the amendment and

Art Unit: 3621

change the claim language so the claims do have clear support or antecedent basis or, (2) amend the specification to ensure that the claim language does have clear support or antecedent basis.

See again MPEP § 608.01(o) (¶3). Should Applicant choose to amend the specification,

Applicant is reminded that—like always—no new matter in the specification is allowed. See 35

U.S.C. § 132(a). If Applicant has any questions on this matter, Applicant is encouraged to

contact the Examiner via the telephone number listed below.

42. The prior art made of record which is considered pertinent to Applicant's disclosure is listed on the document titled 'Notice of Reference Cited' ("PTO-892") Unless expressly noted otherwise by the Examiner, all documents listed on the PTO-892 are cited in their entirety.

43. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to Jacob C. Coppola whose telephone number is (571) 270-3922. The Examiner can normally be reached on Monday-Friday, 9:00 a.m. - 5:00 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached at (571) 272-6779.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 3621

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

PAIR system, please contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/JACOB C. COPPOLA/

Patent Examiner, Art Unit 3621

14 July 2011

/ANDREW J. FISCHER/

Supervisory Patent Examiner, Art Unit 3621